



**THE DATASHEET OF  
0412CDMCDS-1R5MC**



# SMD Power Inductor 0412CDMC/DS



Halogen Free

## Description

- Magnetically shielded.
- L × W × H: 4.75 × 4.35 × 1.2 mm Max.
- Product weight: 0.12 g (Ref.)
- Moisture Sensitivity Level: 1
- RoHS compliance.
- Halogen Free available.

## Environmental Data

- Operating temperature range: -40°C ~ +105°C (including coil's self temperature rise)
- Storage temperature range: -40°C ~ +105°C
- Solder reflow temperature: 260 °C peak.

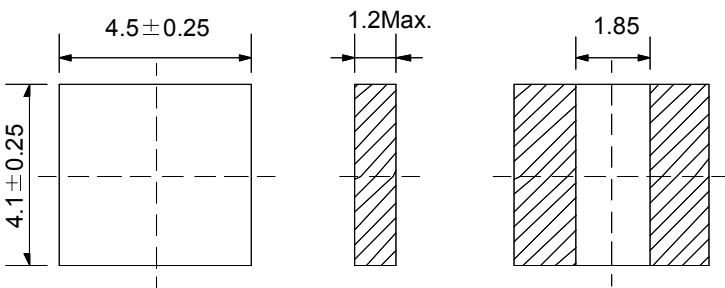
## Packaging

- Carrier tape and reel packaging.

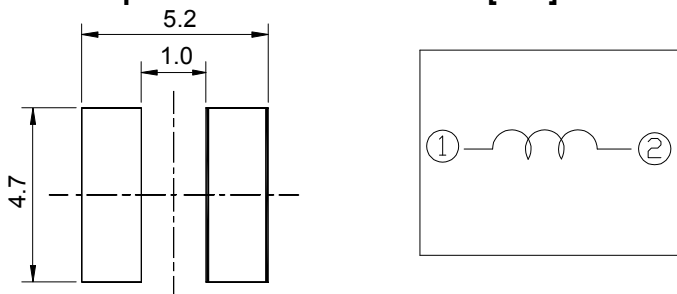
## Applications

- Ideally used in notebook, ultrabook, tablet PC, LCD display, SSD and other low profile high current application.

## Dimension - [mm]



## Land pattern and Schematics - [mm]



## Electrical Characteristics

Part Number	Stamp	Inductance ( $\mu$ H) [within] ※1	D.C.R (m $\Omega$ ) (at 25°C)	Saturation Current (A) ※2	Temperature rise Current (A)	
					V method ※3	T-C method ※4
0412CDMCDS-R47NC	R47	0.47 ± 30 %	20 ± 20 %	7.5	3.8	4.8
0412CDMCDS-1R0MC	1R0	1.0 ± 20 %	40 ± 20 %	6.2	2.8	3.2
0412CDMCDS-1R5MC	1R5	1.5 ± 20 %	60 ± 20 %	5.1	2.4	2.7
0412CDMCDS-2R2MC	2R2	2.2 ± 20 %	80 ± 20 %	4.4	2.0	2.4
0412CDMCDS-3R3MC	3R3	3.3 ± 20 %	115 ± 20 %	3.7	1.8	2.0
0412CDMCDS-4R7MC	4R7	4.7 ± 20 %	180 ± 20 %	2.7	1.4	1.6
0412CDMCDS-6R8MC	6R8	6.8 ± 20 %	250 ± 20 %	2.3	1.2	1.4
0412CDMCDS-100MC	100	10.0 ± 20 %	370 ± 20 %	2.0	1.0	1.2

※1. Inductance measuring condition: at 100kHz.

※2. Saturation current: The value of D.C. current when the inductance decreases to 70% of it's nominal value.

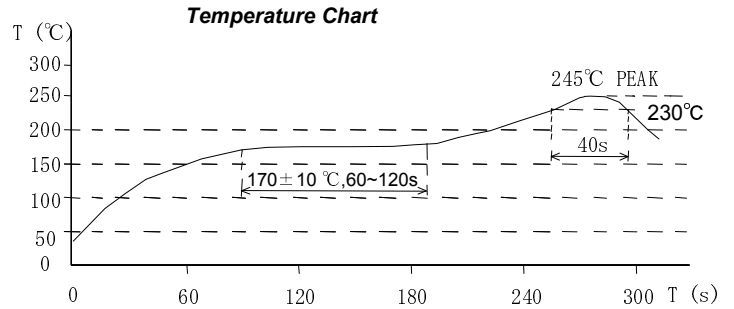
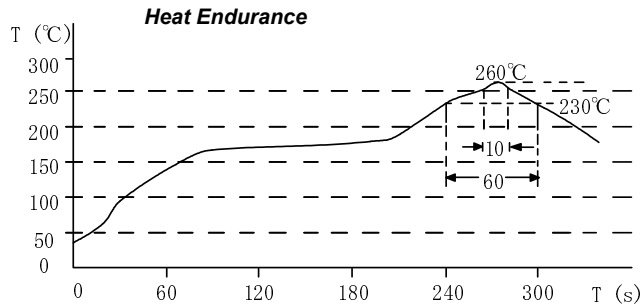
※3. Temperature rise current: The value of D.C. current when the temperature rise is  $\Delta T = 40^\circ\text{C}$  ( $T_a = 20^\circ\text{C}$ ).

※4. Temperature rise current: The value of D.C. current when the top surface temperature rise of test sample is  $\Delta T = 40^\circ\text{C}$ . ( $T_a = 20^\circ\text{C}$ )

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## Solder Reflow Condition



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